

| | | |
|--|-----------------------------------|--|
| Form PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 7-80) PATENT AND TRADEMARK OFFICE LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary) | ATTORNEY DOCKET NO.: 01173.0001U3 | SERIAL NO. 09/994,311 CONFIRMATION NO. 9570 |
| | APPLICANT: Kaufman <i>et al.</i> | |
| | FILING DATE: November 26, 2001 | GROUP: 1656 |

U.S. PATENT DOCUMENTS

| EXAMINER INITIALS | | DOCUMENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|--------------|---------------|-----------------------|-------|----------|----------------------------|
| | B1 | 6,403,319 | June 11, 2002 | Lizardi <i>et al.</i> | | | |
| | B2 | 6,261,782 | July 17, 2001 | Lizardi <i>et al.</i> | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |

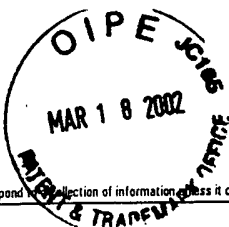
EXAMINER: HORLICK DATE CONSIDERED: 5/5/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

W152383

RECEIVED
SEP 04 2002
TECH CENTER 1600/2900

Please type a plus sign (+) inside this box →



COPY OF PAPERS
ORIGINALLY FILED

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|--|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 <i>09/994,311</i> |
| | | Filing Date | April 6, 2000 <i>November 26, 2001</i> |
| | | First Named Inventor | Paul M. Lizardi <i>Kaufman et al</i> |
| | | Group Art Unit | 1843 <i>1656</i> |
| | | Examiner Name | |
| Sheet 1 of 14 | Attorney Docket Number | YU-126 01173.0001 US | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|---|--|--------------------------------------|--|
| Examiner Initials* | Cite No. ¹ | US Patent Document Number Kind Code ² (if known) | Name of Patentee or Applicant of Cited Document | Date of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| <i>gma</i> | | 5,654,413 | Brenner | 08-05-1997 | CL/Sub RECEIVED MAR 20 2002 TECH CENTER 1600/2900 |
| | | 5,429,807 | Matson, et al. | 07-04-1995 | |
| | | 5,599,695 | Pease, et al. | 02-04-1997 | |
| | | 5,607,924 | Magda, et al. | 03-04-1997 | |
| | | 5,736,330 | Fulton | 04-07-1998 | |
| | | 5,854,033 | Lizardi | 12-29-1998 | |
| | | 5,871,697 | Rothberg, et al. | 02-16-1999 | |
| | | 5,871,918 | Thorp, et al. | 02-16-1999 | |
| | | 5,871,928 | Fodor, et al. | 02-16-1999 | |
| | | 5,968,745 | Thorp, et al. | 10-19-1999 | |
| | | 5,985,153 | Dolan, et al. | 11-16-1999 | |
| | | 5,993,665 | Terstappen & Liberti | 11-30-1999 | |
| | | 6,013,188 | Terstappen & Liberti | 01-11-2000 | |
| <i>gma</i> | | 6,023,540 | Walt, et al. | 02-08-2000 | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|-----------------------|---|--|--|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document Office ³ Number ⁴ Kind Code ⁵ (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| <i>gma</i> | | WO 97/19193 A2 | Yale University | 05-29-1997 | CL/Sub |
| | | WO 98/50782 A2 | Trustees of Tufts College | 05-05-1998 | |
| | | WO 99/19515 A1 | Luminex Corp. | 04-22-1999 | |
| | | WO 99/28505 A1 | Curagen Corp. | 06-10-1999 | |
| | | WO 99/37814 A1 | Luminex Corp. | 07-29-1999 | |
| | | WO 99/64847 A1 | Welch | 12-16-1999 | |
| | | WO 00/04036 A1 | Duke University | 01-27-2000 | |
| <i>gma</i> | | WO 00/08443 A1 | Imperial Cancer Research Technology Limited | 02-17-2000 | |

| | | | |
|----------------------|----------------|--------------------|---------------|
| Examine Signature | <i>HORLICK</i> | Date Considered | <i>5/5/03</i> |
|----------------------|----------------|--------------------|---------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commissioner for Patent, Washington, DC 20231.

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

COPY OF PAPERS
ORIGINALLY FILED

PTO/SB/08A (10-96)

Approved for use through 10/31/99. OMB 0064-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,712 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi Kufner et al |
| | | Group Art Unit | 1645 1656 |
| | | Examiner Name | |
| Sheet 2 of 14 | Attorney Docket Number | YU 120-01173-0001V3 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 9/2/01 | | ADAMS, et al., "Complementary DNA sequencing: expressed sequence tags and human genome project," <i>Science</i> 252(5013):1651-56 (1991). | |
| | | ADAMS, et al., "Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence," <i>Nature</i> 377:3-174 (1995). | |
| | | AIROLDI, et al., "Carcinogen-DNA adducts as tools in risk assessment," <i>Adv. Exp. Med. Biol.</i> 472:231-40 (1999). | |
| | | ALWINE, et al., "Method for detection of specific RNAs in agarose gels by transfer to diazobenzyloxymethyl-paper and hybridization with DNA probes," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 74(12):5350-4 (1977). | |
| | | BAUER, et al., "Identification of differentially expressed mRNA species by an improved display technique (DDRT-PCR)," <i>Nucleic Acids Res.</i> 21(18):4272-80 (1993). | |
| | | BAYLIN, et al., "Alterations in DNA methylation: a fundamental aspect of neoplasia," <i>Adv. Cancer Res.</i> 72:141-96 (1998). | |
| | | BIRD & WOLFFE, "Methylation-induced repression--belts, braces, and chromatin," <i>Cell</i> 99(5):451-4 (1999). | |
| | | BIRD, "DNA methylation de novo," <i>Science</i> 286(5448):2287-8 (1999). | |
| | | BIRKENMEYER & MUSHAHWAR, "DNA probe amplification methods," <i>J. Virol. Methods</i> 35(2):117-26 (1991). | |
| 9/2/01 | | BREAKER & JOYCE, "A DNA enzyme that cleaves RNA," <i>Chemistry & Biology</i> 1:223-229 (1994). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

COPY OF PAPERS
ORIGINALLY FILED

TECH CENTER 1600/2900

PTO/SB08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|---|---|----|----------------------|--|----------------------------|
| Substitute for form 1449A/PTO | | | Complete if Known | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | Application Number | 09/544,743 09/994,311 | |
| | | | Filing Date | April 6, 2000 November 26, 2001 | |
| | | | First Named Inventor | Paul M. Lizardi Fautner et al | |
| | | | Group Art Unit | 1643- 1656 | |
| | | | Examiner Name | | |
| Sheet | 3 | of | 14 | Attorney Docket Number | YU 126 01173.0001U3 |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 9/2/01 | | BRESLAUER, et al., "Predicting DNA duplex stability from the base sequence," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 83(11):3746-50 (1986). | |
| | | CARMI, et al., "Cleaving DNA with DNA," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 95(5):2233-7 (1998). | |
| | | CARTWRIGHT, et al., "Cleavage of chromatin with methidiumpropyl-EDTA . iron(II)," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 80(11):3213-7 (1983). | |
| | | CHAN & NIE, "Quantum dot bioconjugates for ultrasensitive nonisotopic detection," <i>Science</i> 281:2016-18 (1998). | |
| | | CHEE, et al., "Accessing genetic information with high-density DNA arrays," <i>Science</i> 274(5287):610-4 (1996). | |
| | | COSTELLO, et al., "Aberrant CpG-island methylation has non-random and tumour-type-specific patterns," <i>Nat. Genet.</i> 24(2):132-8 (2000). | |
| | | DAVIS & BJORKMAN, "T-cell antigen receptor genes and T-cell recognition," <i>Nature</i> 334:395-402 (1988). | |
| | | DAYHOFF, et al., "A model of evolutionary changes in proteins" in <i>Atlas of Protein Sequence and Structure</i> , M.O. Dayhoff, Editor. 1978, National Biomedical Research Foundation: Washington DC | |
| | | DE HAAS, et al., "Platinum porphyrins as phosphorescent label for time-resolved microscopy," <i>J. Histochem. Cytochem.</i> 45(9):1279-92 (1997). | |
| | | DIATCHENKO, et al, "Suppression subtractive hybridization: a method for generating differentially regulated or tissue-specific cDNA probes and libraries," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 93(12):6025-30 (1996). | |

| | | | |
|----------------------|----------------|-----------------|---------------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|----------------|-----------------|---------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

COPY OF PAPERS
ORIGINALLY FILED

TECH CENTER 1600/2900

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi Kautner et al |
| | | Group Art Unit | 1043 1656 |
| | | Examiner Name | |
| Sheet 4 of 14 | Attorney Docket Number | YU 126 01173.0001U3 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 9/24 | | EDMAN, et al., "Identification of ErbB3-stimulated genes using modified representational difference analysis," <i>Biochem. J.</i> 323 (Pt 1):113-8 (1997). | |
| | | ELLIS, et al., "Chemical cleavage of mismatch: a new look at an established method," <i>Hum. Mutat.</i> 11(5):345-53 (1998). | |
| | | FINNEGAN, et al., "DNA Methylation in Plants," <i>Annual Rev. Physiol.</i> 49:223-247 (1998). | |
| | | FODOR, et al., "Multiplexed biochemical assays with biological chips," <i>Nature</i> 364:555-556 (1993). | |
| | | FREIER, et al., "Improved free-energy parameters for predictions of RNA duplex stability," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 83(24):9373-7 (1986). | |
| | | GAMBOA DA COSTA, et al., "Characterization of the Major DNA Adduct Formed by alpha-Hydroxy-N-desmethyltamoxifen in Vitro and in Vivo," <i>Chem. Res. Toxicol.</i> 13(3):200-207 (2000). | |
| | | GONZALGO & JONES, "Rapid quantitation of methylation differences at specific sites using methylation-sensitive single nucleotide primer extension (Ms-SNuPE)," <i>Nucl. Acids Res.</i> 25:2529-31 (1997). | |
| | | GUO, et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports," <i>Nucleic Acids Res.</i> 22(24):5456-5465 (1994). | |
| | | HABRAKEN, et al., "ATP-dependent assembly of a ternary complex consisting of a DNA mismatch and the yeast MSH2-MSH6 and MLH1-PMS1 protein complexes," <i>J. Biol. Chem.</i> 273(16):9837-41 (1998). | |
| 9/24 | | HABRAKEN, et al., "Binding of insertion/deletion DNA mismatches by the heterodimer of yeast mismatch repair proteins MSH2 and MSH3," <i>Curr. Biol.</i> 6(9):1185-7 (1996). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

COPY OF PAPERS
ORIGINALLY FILED

Please type a plus sign (+) inside this box.



RECEIVED

MAR 20 2002

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0851-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 00/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi-Kaufman et al |
| | | Group Art Unit | 4643 1656 |
| | | Examiner Name | |
| Sheet 5 of 14 | Attorney Docket Number | YU 126- 01173.000103 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|------------------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 9/28 | | HANVEY, et al., "Antisense and antigene properties of peptide nucleic acids," <i>Science</i> 258(5087):1481-5 (1992). | |
| | | HATADA, et al., "A genomic scanning method for higher organisms using restriction sites as landmarks," <i>Proc. Natl. Acad. Sci. USA</i> 88:9523-27 (1991). | |
| | | HEDRICK, et al., "Isolation of cDNA clones encoding T cell-specific membrane-associated proteins," <i>Nature</i> 308(5955):149-53 (1984). | |
| | | HERMANSON, et al., <i>Immobilized Affinity Ligands</i> . (Academic Press, New York, 1992). | |
| | | HOHEISEL, "Sequence-independent and linear variation of oligonucleotide DNA binding stabilities," <i>Nucleic Acids Res.</i> 24(3):430-2 (1996). | |
| | | HOY, et al., "Bromodeoxyuridine/DNA analysis of replication in CHO cells after exposure to UV light," <i>Mutat. Res.</i> 290(2):217-30 (1993). | |
| | | HSU, "Mismatch cleavage detects base deletion in cystic fibrosis gene," <i>Biotechniques</i> 25:692-6 (1998). | |
| | | HUBANK & SCHATZ, "Identifying differences in mRNA expression by representational difference analysis of cDNA," <i>Nucleic Acids Res.</i> 22(25):5640-8 (1994). | |
| | | ITO & SAKAKI, "Fluorescent differential display," <i>Methods Mol. Biol.</i> 85:37-44 (1997). | |
| 9/28 | | JOHNSTONE & THORPE, <i>Immunocytochemistry In Practice</i> (Blackwell Scientific Publications, Oxford, England, 1987) pages 209-216 and 241-242 | |
| Examiner's Signature | HORLICK | | Date Considered 5/5/03 |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

COPY OF PAPERS
ORIGINALLY FILED

Please type a plus sign (+) inside this box ☐



RECEIVED

MAR 20 2002

PTO/SBROBA (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2000 |
| | | First Named Inventor | Paul M. Lizardi-Kautman et al |
| | | Group Art Unit | 1643-1656 |
| | | Examiner Name | |
| Sheet 6 of 14 | Attorney Docket Number | YU 126-01173.000103 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| RPA | | KARGER, et al., "Digital chemiluminescence imaging of DNA sequencing blots using a charge-coupled device camera," <i>Nucleic Acids Res.</i> 20(24):6657-65 (1992) | |
| | | KERKHOF, "A Comparison of Substrates for Quantifying the Signal from a Nonradiolabeled DNA Probe," <i>Analytical Biochemistry</i> 205:359-364 (1992). | |
| | | KEYES, et al., "Overall and internal dynamics of DNA as monitored by five-atom-tethered spin labels," <i>Biophys. J.</i> 72(1):282-90 (1997) | |
| | | KHRAPKO, et al., "Hybridization of DNA with oligonucleotides immobilized in a gel: a convenient method for recording single base replacements," <i>Mol. Biol. (Mosk)</i> . 25(3):718-30 (1991). | |
| | | KIRSCHSTEIN, et al., "Detection of the DeltaF508 mutation in the CFTR gene by means of time- resolved fluorescence methods," <i>Bioelectrochem. Bioenerg.</i> 48(2):415-21 (1999). | |
| | | KORTENKAMP, et al., "Genotypic selection of mutated DNA sequences using mismatch cleavage analysis, a possible basis for novel mutation assays," <i>Mutagenesis</i> 12:335-8 (1997). | |
| | | KOZIAN & KIRSCHBAUM, "Comparative gene-expression analysis," <i>Trends Biotechnol.</i> 17(2):73-8 (1999). | |
| | | KRICKA, "Chemiluminescent and bioluminescent techniques," <i>Clin. Chem.</i> 37(9):1472-81 (1991). | |
| RPA | | KRICKA, "Selected strategies for improving sensitivity and reliability of immunoassays," <i>Clin. Chem.</i> 40(3):347-57 (1994). | |
| | | KUMKE, et al., "Temperature and quenching studies of fluorescence polarization detection of DNA hybridization," <i>Anal. Chem.</i> 69(3):500-6 (1997). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



COPY OF PAPERS
ORIGINALLY FILED

RECEIVED

MAR 20 2002

PTO/SB/08A (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Please type a plus sign (+) inside this box →



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | | | |
|---|---|----------------------|--------------------------------|------------------------|---------------------|
| Substitute for form 1449A/PTO | | Complete if Known | | | |
| | | Application Number | 09/544,718 09/994,311 | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Filing Date | April 6, 2000 November 26 2001 | | |
| | | First Named Inventor | Paul M. Lizardi Kutner et al | | |
| | | Group Art Unit | 1643-1656 | | |
| | | Examiner Name | | | |
| Sheet | 7 | of | 14 | Attorney Docket Number | YU 126 01173.000103 |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| HJH | | LANDEGREN, "Molecular mechanics of nucleic acid sequence amplification," <i>Trends Genetics</i> 9:199-202 (1993). | |
| | | LANGER, et al., "Enzymatic synthesis of biotin-labeled polynucleotides: Novel nucleic acid affinity probes", <i>Proc. Natl. Acad. Sci. USA</i> 78(11):6633-6637 (1981). | |
| | | LAVERY, et al., "Selective amplification via biotin- and restriction-mediated enrichment (SABRE), a novel selective amplification procedure for detection of differentially expressed mRNAs," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 94(13):6831-6 (1997). | |
| | | LEE, et al., "Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth factor treatment," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 92(18):8303-7 (1995). | |
| | | LIANG & PARDEE, "Differential display of eukaryotic messenger RNA by means of the polymerase chain reaction," <i>Science</i> . 257(5072):967-71 (1992). | |
| | | LIANG & PARDEE, "Recent advances in differential display," <i>Curr. Opin. Immunol.</i> 7(2):274-80 (1995). | |
| | | LIPSHUTZ, "Likelihood DNA sequencing by hybridization," <i>J. Biomol. Struct. Dyn.</i> 11(3):637-53 (1993). | |
| | | LISITSYN, et al., "Cloning the differences between two complex genomes," <i>Science</i> 259(5097):946-51 (1993). | |
| | | LIZARDI, et al., "Mutation detection and single-molecule counting using isothermal rolling-circle amplification," <i>Nat Genet.</i> 19(3):225-32 (1998). | |
| HJH | | LODOVICI, et al., "Levels of 8-hydroxydeoxyguanosine as a marker of DNA damage in human leukocytes," <i>Free Radic. Biol. Med.</i> 28(1):13-7 (2000). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

COPY OF PAPERS
ORIGINALLY FILED

PTO/SB/08A (10-98)

Approved for use through 10/1/99 OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi Kaufman et al |
| | | Group Art Unit | 1642-1636 |
| | | Examiner Name | |
| Sheet 8 of 14 | Attorney Docket Number | YU-126-01173.0001 v3 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| [Signature] | LU & HSU, | "Detection of single DNA base mutations with mismatch repair enzymes," <i>Genomics</i> 14(2):249-55 (1992). | |
| | MAEHIRA, et al., | "Alterations of protein kinase C, 8-hydroxydeoxyguanosine, and K-ras oncogene in rat lungs exposed to passive smoking," <i>Clin. Chim. Acta.</i> 289(1-2):133-44 (1999). | |
| | MANIATIS, et al., | "The isolation of structural genes from libraries of eucaryotic DNA," <i>Cell</i> 15(2):687-701 (1978). | |
| | MANSFIELD, et al., | "Nucleic acid detection using non-radioactive labeling methods," <i>Mol. Cell Probes</i> 9(3):145-56 (1995). | |
| | MASHAL, | "Detection of mutations by cleavage of DNA heteroduplexes with bacteriophage resolvases," <i>Nat. Genet.</i> 9:177-83 (1995). | |
| | MCCREERY, | "Digoxigenin labeling," <i>Mol. Biotechnol.</i> 7(2):121-4 (1997). | |
| | MELKI, et al., | "Concurrent DNA hypermethylation of multiple genes in acute myeloid leukemia," <i>Cancer Res.</i> 59(15):3730-40 (1999). | |
| | MICHAEL, et al., | "Randomly ordered addressable high-density optical sensor arrays," <i>Anal. Chem.</i> 70(7):1242-8 (1998). | |
| | NAPIER, et al., | "Probing biomolecule recognition with electron transfer: electrochemical sensors for DNA hybridization," <i>Bioconjug. Chem.</i> 8(6):906-13 (1997). | |
| [Signature] | NEDDERMANN & JIRICNY, | "Efficient removal of uracil from G.U mispairs by the mismatch-specific thymine DNA glycosylase from HeLa cells," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 91(5):1642-6 (1994). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



RECEIVED

COPY OF PAPERS
ORIGINALLY FILED

MAR 20 2002

Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|---|---|----|----|---------------------------------|--|
| Substitute for form 1449A/PTO | | | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | | Application Number | |
| | | | | 09/544,713 09/994,311 | |
| | | | | Filing Date | |
| | | | | April 6, 2000 November 26, 2001 | |
| | | | | First Named Inventor | |
| | | | | Paul M. Lizardi Keitman et al | |
| Group Art Unit | | | | 4643 1656 | |
| Examiner Name | | | | | |
| Sheet | 9 | of | 14 | Attorney Docket Number | |
| | | | | YU 126 01173.000103 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | | | T ⁷ |
|--|-----------------------|--|--|--|----------------|
| Examiner's Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | | | |
| JPA | | NGUYEN, et al., "Modification of DNA duplexes to smooth their thermal stability independently of their base content for DNA sequencing by hybridization," <i>Nucleic Acids Res.</i> 25(15):3059-3065 (1997). | | | |
| | | NGUYEN, et al., "Smoothing of the thermal stability of DNA duplexes by using modified nucleosides and chaotropic agents," <i>Nucleic Acids Res.</i> 27(6):1492-1498 (1999) | | | |
| | | NIKIFOROV, et al., "Genetic Bit Analysis: a solid phase method for typing single nucleotide polymorphisms," <i>Nucleic Acids Res.</i> 22(20):4167-75 (1994). | | | |
| | | NIKIFOROV, et al., "The Use of Phosphorothioate Primers and Exonuclease Hydrolysis for the Preparation of Single-stranded PCR Products and their Detection by Solid-phase Hybridization," <i>PCR Methods and Applications</i> 3:285-291 (1994). | | | |
| | | NURMI, et al., "A new label technology for the detection of specific polymerase chain reaction products in a closed tube," <i>Nucleic Acids Res.</i> 28(8):28 (2000). | | | |
| | | O'NEILL & SINCLAIR, "Isolation of rare transcripts by representational difference analysis," <i>Nucleic Acids Res.</i> 25:2681-2682 (1997). | | | |
| | | OETTING, et al., "Multiplexed short tandem repeat polymorphisms of the Weber 8A set of markers using tailed primers and infrared fluorescence detection," <i>Electrophoresis</i> 19(18):3079-83(1998) | | | |
| | | OLEJNIK, et al., "Photocleavable affinity tags for isolation and detection of biomolecules," <i>Methods Enzymol.</i> 291:135-54 (1998). | | | |
| JPA | | OLEJNIK, et al., "Photocleavable aminotag phosphoramidites for 5'-termini DNA/RNA labeling," <i>Nucleic Acids Res.</i> 26(15):3572-6 (1998). | | | |
| | | OLEJNIK, et al., "Photocleavable biotin derivatives: a versatile approach for the isolation of biomolecules," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 92(16):7590-4 (1995). | | | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. * Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

TECH CENTER 1600/2900

COPY OF PAPERS
ORIGINALLY FILED

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------------|---|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713- 09/994,311 |
| | | Filing Date | April 6, 2000- November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi- Kutman et al |
| | | Group Art Unit | 1643- 1656 |
| | | Examiner Name | |
| Sheet 10 of 14 | Attorney Docket Number | YU 126 01173.000103 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|---|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 927A | | OLEJNIK, et al., "Photocleavable biotin phosphoramidite for 5'-end-labeling, affinity purification and phosphorylation of synthetic oligonucleotides," <i>Nucleic Acids Res.</i> 24:361-66 (1996). | |
| | | OLEJNIK, et al., "Photocleavable peptide-DNA conjugates: synthesis and applications to DNA analysis using MALDI-MS," <i>Nucleic Acids Res.</i> 27(23):4626-31 (1999). | |
| | | PACIOTTI, et al., "Mec1p is essential for phosphorylation of the yeast DNA damage checkpoint protein Ddc1p, which physically interacts with Mec3p," <i>EMBO J.</i> 17(14):4199-209 (1998). | |
| | | PANG, et al., "Functional domains of the <i>Saccharomyces cerevisiae</i> Mlh1p and Pms1p DNA mismatch repair proteins and their relevance to human hereditary nonpolyposis colorectal cancer-associated mutations," <i>Mol. Cell. Biol.</i> 17(8):4465-73 (1997). | |
| | | PEASE, et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis," <i>Proc. Natl. Acad. Sci. USA</i> 91(11):5022-5026 (1994). | |
| | | PHILLIPS, et al., "Methods of DNA adduct determination and their application to testing compounds for genotoxicity," <i>Environ. Mol. Mutagen</i> 35(3):222-233 (2000). | |
| | | PODHAJSKA & SZYBALSKI, "Conversion of the <i>FokI</i> endonuclease to a universal restriction enzyme: cleavage of phage M13mp7 DNA at predetermined sites," <i>Gene</i> 40(2-3):175-82 (1985)[published erratum appears in <i>Gene</i> 43(3):325 (1985)]. | |
| | | PRASHAR & WEISSMAN, "Analysis of differential gene expression by display of 3' end restriction fragments of cDNAs," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 93:659-663 (1996). | |
| | | PUREWAL, et al., "Association between acetylase genotype and 2-amino-1-methyl-6- phenylimidazo[4,5-b]pyridine (PhIP) DNA adduct formation in colon and prostate of inbred Fischer 344 and Wistar Kyoto rats," <i>Cancer Lett.</i> 149(1-2):53-60 (2000). | |
| 927A | | RABINOWICZ, et al., "Differential methylation of genes and retrotransposons facilitates shotgun sequencing of the maize genome," <i>Nat. Genet.</i> 23:305-308 (1999). | |

| | | | |
|----------------------|----------------|-----------------|---------------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|----------------|-----------------|---------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box →



RECEIVED

COPY OF PAPERS
ORIGINALLY FILED

MAR 20 2002

PTO/SB08A (10-86)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2300

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it bears a label that includes an OMB control number

| | | | |
|---|----|------------------------|--|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizard Kutman et al |
| | | Group Art Unit | 1643 1656 |
| | | Examiner Name | |
| | | Attorney Docket Number | YU 126-01123.0001 U3 |
| Sheet | 11 | 14 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------------------|--|----------------|
| Examiner's Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| 92A | | REN, et al., "Chemical mismatch cleavage combined with capillary electrophoresis: detection of mutations exon 8 of the cystathionine beta-synthase gene," <i>Clin. Chem.</i> 44:2108-14 (1998). | |
| | | RODA, et al., "Chemiluminescent imaging of enzyme-labeled probes using an optical microscope-videocamera luminograph," <i>Anal. Biochem.</i> 257(1):53-62 (1998). | |
| | | SANTALUCIA, et al., "Improved nearest-neighbor parameters for predicting DNA duplex stability," <i>Biochemistry</i> 35:3555-3562 (1996). | |
| | | SCHENA, et al., "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray," <i>Science</i> 270:467-470 (1995). | |
| | | SCHULTZ & DERVAN, "Sequence-specific double-strand cleavage of DNA by penta-N- methylpyrrolocarboxamide-EDTA X Fe(II)," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 80(22):6834-7 (1983). | |
| | | SEWELL & DURBIN, "Method for calculation of probability of matching a bounded regular expression in a random data string," <i>J. of Computational Biology</i> 2:25-31 (1995). | |
| | | SIDDIQI, et al., "Evaluation of electrochemiluminescence- and bioluminescence-based assays for quantitating specific DNA," <i>J. Clin. Lab. Anal.</i> 10(6):423-31 (1996). | |
| | | SQUIRE, et al., "Multiple frequency fluorescence lifetime imaging microscopy," <i>J. Microscopy</i> 197(2):136-149 (2000). | |
| | | STEVENSON, et al., "Synchronous luminescence: a new detection technique for multiple fluorescent probes used for DNA sequencing," <i>Biotechniques</i> 16(6):1104-11 (1994). | |
| 92A | | STIMPSON, et al., "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides," <i>Proc. Natl. Acad. Sci. USA</i> 92(14):6379-6383 (1995). | |

| | | | |
|----------------------|----------------|-----------------|---------------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|----------------|-----------------|---------------|

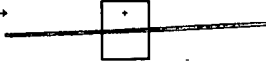
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

COPY OF PAPERS
ORIGINALLY FILED

Please type a plus sign (+) inside this box →



RECEIVED

MAR 20 2002

PTO/SB/08A (10-95)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| | | | |
|---|------------------------|----------------------|---------------------------------|
| Substitute for form 1449A/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | Application Number | 09/544,713 09/994,311 |
| | | Filing Date | April 6, 2000 November 26, 2001 |
| | | First Named Inventor | Paul M. Lizardi Bartman et al |
| | | Group Art Unit | 4643 1656 |
| | | Examiner Name | |
| Sheet 12 of 14 | Attorney Docket Number | YU 126 01173.000103 | |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | | |
|--|-----------|--|----|
| Examiner's Initials* | Cite No.¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T² |
| 924 | | SWAROOP, et al., "A simple and efficient cDNA library subtraction procedure: isolation of human retina-specific cDNA clones," <i>Nucleic Acids Res.</i> 19(8):1954 (1991). | |
| | | SYVANEN, et al., "Fast quantification of nucleic acid hybrids by affinity-based hybrid collection," <i>Nucleic Acids Res.</i> 14(12):5037-48 (1986). | |
| | | SZYBALSKI, "Universal restriction endonucleases: designing novel cleavage specificities by combining adapter oligodeoxynucleotide and enzyme moieties," <i>Gene</i> 40(2-3):169-73 (1985). | |
| | | TAYLOR, <u>Protein immobilization: fundamentals and applications</u> (M. Dekker, New York, 1991). | |
| | | TIBBE, et al., "Optical tracking and detection of immunomagnetically selected and aligned cells," <i>Nat. Biotechnol.</i> 17(12):1210-3 (1999). | |
| | | UNRAU & DEUGAU, "Non-cloning amplification of specific DNA fragments from whole genomic DNA digests using DNA 'indexers'" <i>Gene</i> 145:163-169 (1994). | |
| | | VASMATZIS, et al., "Discovery of three genes specifically expressed in human prostate by expressed sequence tag database analysis," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 95:300-304 (1998). | |
| | | VELCULESCU, et al., "Serial analysis of gene expression," <i>Science</i> . 270(5235):484-7 (1995). | |
| | | VENEZIA & O'HARA, "Rapid motif compliance scoring with match weight sets," <i>Comput. Appl. Biosci.</i> 9(1):65-9 (1993). | |
| 924 | | VO-DINH, et al., "Surface-enhanced Raman gene probes," <i>Anal. Chem.</i> 66(20):3379-83 (1994). | |

| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORLICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

COPY OF PAPERS
ORIGINALLY FILED

Please type a plus sign (+) inside this box



RECEIVED

MAR 20 2002

PTO/SB/08A (10-96)

Approved for use through 10/31/99. OMB 0651-0031
Patent Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

TECH CENTER 1600/2900
Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number

09/544,743

09/994,311

Filing Date

April 6, 2000 November 26, 2001

First Named Inventor

Paul M. Lizardi, Paul M. Lizardi et al

Group Art Unit

4643 1656

Examiner Name

Attorney Docket Number

YU 126-01173.000103

Sheet 13 of 14

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner's Initials* | Cite No.¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T² |
|----------------------|-----------|--|----|
| RAJ | | VOLKERS, et al., "Microwave label detection technique for DNA in situ hybridization," <i>Eur. J. Morphol.</i> 29(1):59-62 (1991). | |
| | | WADA, et al., "Representational difference analysis of cDNA of genes expressed in embryonic kidney," <i>Kidney Int.</i> 51:1629-1638 (1997). | |
| | | WALKER, et al., "Strand displacement amplification--an isothermal, in vitro DNA amplification technique," <i>Nucleic Acids Res.</i> 20(7):1691-6 (1992). | |
| | | WALT, "Techview: molecular biology. Bead-based fiber-optic arrays," <i>Science</i> 287(5452):451-2 (2000). | |
| | | WANSINK, et al., "Fluorescent Labeling of Nascent RNA Reveals Transcription by RNA Polymerase II in Domains Scattered Throughout the Nucleus," <i>Journal of Cell Biology</i> 122(2): 283-293 (1993). | |
| | | WHITNEY, et al., "A genome-wide functional assay of signal transduction in living mammalian cells," <i>Nat. Biotechnol.</i> 16(13):1329-33 (1998). | |
| | | WOOD, et al., "Base composition-independent hybridization in tetramethylammonium chloride: a method for oligonucleotide screening of highly complex gene libraries," <i>Proc. Natl. Acad. Sci. USA</i> 82(6):1585-1588 (1985). | |
| | | XIONG & LAIRD, "COBRA: a sensitive and quantitative DNA methylation assay," <i>Nuc. Acid Res.</i> 25(12):2532-2534 (1997). | |
| | | YAO & KOW, "Further characterization of <i>Escherichia coli</i> endonuclease V. Mechanism of recognition for deoyinosine, deoxyuridine, and base mismatches in DNA," <i>J. Biol. Chem.</i> 272:30774-79 (1997). | |
| RAJ | | YEH, et al., "Mammalian topoisomerase I has base mismatch nicking activity," <i>J. Biol. Chem.</i> 269(22):15498-504 (1994). | |

Examiner's
Signature

HORLICK

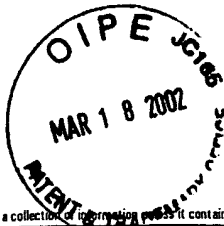
Date
Considered

5/5/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



**COPY OF PAPERS
ORIGINALLY FILED**

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|---|----|----|----|------------------------|--|
| Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 69/544,713 09/944,311 |
| | | | | Filing Date | April 6, 2000 November 26, 2000 |
| | | | | First Named Inventor | Paul M. Lizardi Paul M. Lizardi |
| | | | | Group Art Unit | 1643 1656 |
| | | | | Examiner Name | |
| Sheet | 14 | of | 14 | Attorney Docket Number | YU 126 01173.000103 |

| OTHER ART -- NON PATENT LITERATURE DOCUMENTS | | |
|--|-----------------------|--|
| Examiner's Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published |
| | | YOUIL, et al., "Detection of 81 of 81 known mouse beta-globin promoter mutations with T4 endonuclease VII--the EMC method," <i>Genomics</i> 32:431-435 (1996). |
| | | YU, et al., "Cyanine dye dUTP analogs for enzymatic labeling of DNA probes," <i>Nucleic Acids Research</i> 22(15):3226-3232 (1994). |
| | | ZLOKARNIK, et al., "Quantitation of transcription and clonal selection of single living cells with β-lactamase as reporter," <i>Science</i> 279:84-88 (1998). |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

T²

RECEIVED
MAR 20 2002
TECH CENTER 1600/2900

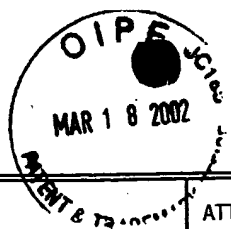
| | | | |
|----------------------|---------|-----------------|--------|
| Examiner's Signature | HORRICK | Date Considered | 5/5/03 |
|----------------------|---------|-----------------|--------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁷ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁸ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁹ Applicant to place a check mark here if

² Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ³ Applicant to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



COPY OF PAPERS
ORIGINALLY FILED

ATTORNEY DOCKET NO. 01173.000103
SERIAL NO. 09/637,751

Page 1 of 6

09/994,311

01173.000103

Form PTO-1449
U.S. DEPARTMENT OF COMMERCE (Rev. 7-80)
PATENT AND TRADEMARK OFFICE

LIST OF INFORMATION CITED BY APPLICANT
(Use several sheets if necessary)

ATTORNEY DOCKET NO.: ~~01173.000103~~ 01173.000103

SERIAL NO. ~~09/637,751~~
09/994,311

APPLICANT: Kaufman et al.

FILING DATE: ~~August 11, 2000~~ November 26, 2001

GROUP: ~~1656~~ 1656

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|----|--------------|----------|------------------------|-------|----------|-------------------------------|
| 9224 | AA | 6,023,540 | 02/08/00 | Walt et al. | 385 | 12 | |
| | AB | 6,013,188 | 01/11/00 | Terstappen and Liberti | 210 | 695 | |
| | AC | 5,993,665 | 11/30/99 | Terstappen and Liberti | 210 | 695 | |
| | AD | 5,599,695 | 02/04/97 | Pease et al. | 435 | 91.1 | |
| | AE | 5,985,153 | 11/16/99 | Dolan et al. | 210 | 695 | |
| | AF | 5,968,745 | 10/19/99 | Thorp et al. | 435 | 6 | |
| | AG | 5,871,928 | 02/16/99 | Fodor et al. | 435 | 6 | |
| | AH | 5,871,918 | 02/16/99 | Thorp et al. | 435 | 6 | |
| | AI | 5,871,697 | 02/16/99 | Rothberg et al. | 422 | 68.1 | |
| | AJ | 5,854,033 | 12/29/98 | Lizardi | 435 | 91.2 | |
| | AK | 5,736,330 | 04/07/98 | Fulton | 435 | 6 | |
| | AL | 5,654,413 | 08/05/97 | Brenner | 536 | 22.1 | |
| | AM | 5,607,924 | 03/04/97 | Magda et al. | 514 | 441 | |
| 9224 | AN | 5,429,807 | 07/04/95 | Matson et al. | 422 | 131 | |

RECEIVED
MAR 20 2002
TECH CENTER 1600/2800

FOREIGN PATENT DOCUMENTS

| | | | | | | | |
|------|----|----------------|----------|---|------|-------|--|
| 9224 | AO | WO 00/08443 A1 | 02/17/00 | Imperial Cancer Research Technology Limited | G01N | 21/64 | |
| | AP | WO 00/04036 A1 | 01/27/00 | Duke University | G01N | 27/26 | |
| | AQ | WO 99/64847 A1 | 12/16/99 | Xanthon, Inc. | G01N | 27/26 | |
| | AR | WO 99/37814 A1 | 07/29/99 | Luminex Corp. | C12Q | 1/68 | |
| | AS | WO 99/28505 A1 | 06/10/99 | Curagen Corp. | C12Q | 1/68 | |
| | AT | WO 99/19515 A1 | 04/22/99 | Luminex Corp. | C12Q | 1/68 | |
| | AU | WO 98/50782 A2 | 11/12/98 | Trustees of Tufts College | G01N | 21/77 | |
| 9224 | AV | WO 97/19193 A2 | 05/29/97 | Yale University | C12Q | 1/68 | |

OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|------|----|---|
| 9224 | AW | Adams et al. "Complementary DNA sequencing: expressed sequence tags and human genome project." Science 252(5013): 1651-56 (1991) |
| 9224 | AX | Adams et al. "Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence." Nature 377:3-174 (1995) |

MAR 18 2002

RECEIVED

01173.000103

ATTORNEY DOCKET NO. 01173.000103

MAR 20 2002 SERIAL NO. 09/637.751

Page 2 of 6

TECH CENTER 1000/2000

| | |
|----|---|
| AY | Airoidi et al., "Carcinogen-DNA adducts as tools in risk assessment," <i>adv. Exp. Med. Biol.</i> 472:231-40 (1999) |
| AZ | Alwine et al., "Method for detection of specific RNAs in agarose gels by transfer to diazobenzyloxymethyl-paper and hybridization with DNA probes," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 74(12):5350-4 (1977) |
| BA | Bauer et al., "Identification of differentially expressed mRNA species by an improved display technique (DDRT-PCR)," <i>Nucleic Acids Res.</i> 21(18): 4272-80 (1993) |
| BB | Baylin et al., "Alterations in DNA methylation: a fundamental aspect of neoplasia," <i>Adv. Cancer Res.</i> 72:141-96 (1998) |
| BC | Bird & Wolffe, "Methylation-induced repression-belts, braces, and chromatin," <i>Cell</i> 99(5):451-4 (1999) |
| BD | Bird, "DNA methylation de novo," <i>Science</i> 286 (5448):2287-8 (1999) |
| BE | Birkenmeyer & Mushahwar, "DNA prob amplification methods," <i>J. Virol. Methods</i> 35(2):117-26 (1991) |
| BF | Breaker & Joyce, "A DNA enzyme that cleaves RNA," <i>Chemistry & Biology</i> 1:223-229 (1994) |
| BG | Breslauer et al., "Predicting DNA duplex stability from the base sequence," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 83(11):3746-50 (1986) |
| BH | Carmi et al., "Cleaving DNA with DNA," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95(5):2233-7 (1998) |
| BI | Cartwright et al., "Cleavage of chromatin with methidiumpropyl-EDTA . Iron(II)," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 80(11): 3213-7(1983) |
| BJ | Chan & Nie, "Quantum dot bioconjugates for ultrasensitive nonisotopic detection," <i>Science</i> 281:2016-18 (1998) |
| BK | Chee et al., "Accessing genetic information with high-density DNA arrays," <i>Science</i> 274 (5287): 610-4 (1996) |
| BL | Costello et al., "Aberrant CpG-island methylation has non-random and tumour-type-specific patters," <i>Nat. Genet.</i> 24(2):132-8 (2000) |
| BM | Davis & Bjorkman, "T-cell antigen receptor genes and T-cell recognition," <i>Nature</i> 334:395-402 (1988) |
| BN | Dayhoff et al., "A model of evolutionary changes in proteins" in Atlas of Protein Sequence and Structure, M.O. Dayhoff, Editor - 1978, National Biomedical Research Foundation: Washington, D.C. |
| BO | De Haas et al., "Platinum porphyrins as phosphorescent label for time-resolved microscopy," <i>J.Histochem. Cytochem.</i> 45(9):1279-92 (1997) |
| BP | Diatchenko et al., "Suppression substrative hybridization: a method for generating differentially regulated or tissue specific cDNA probes and libraries," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 93(12):6025-30 (1996) |
| BQ | Edman et al., "Identification of ErbB3-stimulated genes using modified representational difference analysis," <i>Biochem. J.</i> 323 (Pt 1):113-8 (1997) |
| BR | Ellis et al., "Chemical cleavage of mismatch: a new look at an established method," <i>Hum. Mutat.</i> 11(5):345-53 (1998) |
| BS | Finnegan et al., "DNA Methylation in Plants," <i>Annual Rev. Physiol.</i> 49:223-247 (1998) |
| BT | Fodor et al., "Multiplexed biochemical assays with biological chips," <i>Nature</i> 364:555-556 (1993). |
| BU | Freier et al., "Improved free-energy parameters for predictions of RNA duplex stability," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 83(24):9373-7 (1986) |
| BV | Gamboa Da Costa et al., "Characterization of the Major DNA Adduct Formed by alpha-Hydroxy-N desmethyltamoxifen in Vitro and in Vivo," <i>Chem. Res. Toxicol</i> 13(3):200-207 (2000) |
| BW | Gonzalzo & Jones, "Rapid quantitation of methylation differences at specific sites using methylation-sensitive single nucleotide primer extension (Ms-SNuPE)," <i>Nucl. Acids Res.</i> 25:2529-31 (1997) |
| BX | Guo et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports," <i>Nucleic Acids Res.</i> 22(24):5456-5465 (1994) |
| BY | Habraken et al., "ATP-dependent assembly of a ternary complex consisting of a DNA mismatch and the yeast MSH2-MSH6 and MLH1-PMS1 protein complexes," <i>J. Biol. Chem.</i> 273(16):9837-41 (1998) |
| BZ | Habraken et al., "Binding of insertion/deletion DNA mismatches by the heterodimer of yeast mismatch repair proteins MSH2 and MSH3," <i>Curr. Biol.</i> 6(9):1185-7 (1996) |



COPY OF PAPERS
ORIGINALLY FILED

RECEIVED

01173.000103

ATTORNEY DOCKET NO. 01173.000103

SERIAL NO. 09/637-751

Page 3 of 6

MAR 20 2002
09/994,311

TECH CENTER 1600/2900

| | |
|----|--|
| CA | Hanvey et al.. "Antisense and antigene proper-ties of peptide nucleic acids." <i>Science</i> 258(5087):1481-5 (1992) |
| CB | Hatada et al.. "A genomic scanning method for higher organisms using restriction sites as landmarks." <i>Proc. Natl. Acad. Sci. USA</i> 88:9523-27 (1991) |
| CC | Hedrick et al.. "Isolation of cDNA clones encoding T cell-specific membrane-associated proteins." <i>Nature</i> 308(5955):149-53 (1984) |
| CD | Hermanson et al.. <i>Immobilized Affinity Ligands</i> . (Academic Press, New York, 1992) |
| CE | Hoheisel. "Sequence-independent and linear variation of oligonucleotide DNA binding stabilities." <i>Nucleic Acids Res.</i> 24(3):430-2 (1996) |
| CF | Hoy et al.. "Bromodeoxyuridine/DNA analysis of replication in CHO cells after exposure to UV light." <i>Mutat. Res.</i> 290(2):217-30 (1993) |
| CG | Hsu. "Mismatch cleavage detects base deletion in cystic fibrosis gene." <i>Biotechniques</i> 25:692-6 (1998) |
| CH | Hubank and Schatz. "Identifying differences in mRNA expression by representational difference analysis of cDNA." <i>Nucleic Acids Res.</i> 22(25):5640-8 (1994) |
| CI | Ito and Sakaki. "Fluorescent differential display." <i>Methods Mol. Biol.</i> 85:37-44 (1997) |
| CJ | Johnstone and Thorpe. <i>Immunocytochemistry In Practice</i> (Blackwell Scientific Publications, Oxford, England, 1987) pages 209-216 and 241-242 |
| CK | Karger et al.. "Digital chemiluminescence imaging of DNA sequencing blots using a charge-coupled device camera." <i>Nucleic Acids Res.</i> 20(24):6657-65 (1992) |
| CL | Kerkhof. "A Comparison of Substrates for Quantifying the Signal from a Nonradiolabeled DNA Probe." <i>Analytical Biochemistry</i> 205:359-364 (1992) |
| CM | Keyes. et al.. "Overall and internal dynamics of DNA as monitored by tive-atom-tethered spin labels." <i>Biophys. J.</i> 2(1):282-90 (1997) |
| CN | Khrapko et al.. "Hybridization of DNA with oligonucleotides immobilized in a gel: a convenient method for recording single base replacements." <i>Mol. Biol. (Mosk.)</i> 25(3):718-30 (1991) |
| CO | Kirschstein et al.. "Detection of the DeltaF508 mutation in the CFTR gene by means of time- resolved luorescence methods." <i>Bioelectrochem. Bioenerg.</i> 48(2):415-21 (1999) |
| CP | Kortenkamp. et al.. "Genotypic selection of mutated DNA sequences using mismatch cleavage analysis. a possible basis for novel mutation assays." <i>Mutagenesis</i> 12:335-8 (1997) |
| CQ | Kozian and Kirschbaum. "Comparative gene-expression analysis." <i>Trends Biotechnol.</i> 17(2):73-8 (1999) |
| CR | Kricka. "Chemiluminescent and bioluminescent techniques." <i>Clin. Chem.</i> 37(9):1472-81 (1991) |
| CS | Kricka. "Selected strategies for improving sensitivity and reliability of immunoassays." <i>Clin. Chem.</i> 40(3):347-57 (1994) |
| CT | Kumke et al.. "Temperature and quenching studies of fluorescence polarization detection of DNA hybridization." <i>Anal. Chem.</i> 69(3):500-6 (1997) |
| CU | Landegren. "Molecular mechanics of nucleic acid sequence amplification." <i>Trends Genetics</i> 9:199-202 (1993) |
| CV | Langer et al.. "Enzymatic synthesis of biotin-labeled polynucleotides: Novel nucleic acid affinity probes". <i>Proc. Natl. Acad. Sci. USA</i> 78(11):6633-6637 (1981) |
| CW | Lavery et al.. "Selective amplification via biotin- and restriction-mediated enrichment (SABRE). a novel selective amplification procedure for detection of differentially expressed mRNAs." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 94(13):6831-6 (1997) |
| CX | Lee et al.. "Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth factor treatment." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 92(18):8303-7 (1995) |
| CY | Liang and Pardee. "Differential display of eukaryotic messenger RNA by means of the polymerase chain reaction." <i>Science</i> 257(5072):967-71 (1992) |

COPY OF PAPERS
ORIGINALLY FILED



RECEIVED

MAR 20 2002

TECH CENTER 1600/2900

ATTORNEY DOCKET NO. 01173-000101
SERIAL NO. 00/637-751

Page 4 of 6

01173.000103

09/994,311

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |



RECEIVED

MAR 20 2002

TECH CENTER 1600/2900

ATTORNEY DOCKET NO. 01173.000104-
SERIAL NO. 09/637,754
Page 5 of 6

01173.000103

09/994,311

| | |
|----|---|
| DX | Olejnik et al.. "Photocleavable peptide-DNA conjugates: synthesis and applications to DNA analysis using MALDI-MS." <i>Nucleic Acids Res.</i> 27(23):4626-31 (1999) |
| DY | Paciotti et al.. "Mec1p is essential for phosphorylation of the yeast DNA damage checkpoint protein Ddc1p, which physically interacts with Mec3p." <i>EMBO J.</i> 17(14):4199-209 (1998) |
| DZ | Pang et al.. "Functional domains of the <i>Saccharomyces cerevisiae</i> Mlh1p and Pms1p DNA mismatch repair proteins and their relevance to human hereditary nonpolyposis colorectal cancer-associated mutations." <i>Mol. Cell. Biol.</i> 17(8):4465-73 (1997) |
| EA | Pease et al.. "Light-generated oligonucleotide arrays for rapid DNA sequence analysis." <i>Proc. Natl. Acad. Sci. USA</i> 91(11):5022-5026 (1994) |
| EB | Phillips et al.. "Methods of DNA adduct determination and their application to testing compounds for genotoxicity." <i>Environ. Mol. Mutagen</i> 35(3):222-233 (2000) |
| EC | Podhajski and Szybalski. "Conversion of the <i>FokI</i> endonuclease to a universal restriction enzyme: cleavage of phage M13mp7 DNA at predetermined sites." <i>Gene</i> 40(2-3):175-82 (1985) [published erratum appears in <i>Gene</i> 43(3):325 (1985)] |
| ED | Prashar and Weissman. "Analysis of differential gene expression by display of 3' end restriction fragments of cDNAs." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 93:659-663 (1996) |
| EE | Purewal et al.. "Association between acetylator genotype and 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP) DNA adduct formation in colon and prostate of inbred Fischer 344 and Wistar Kyoto rats." <i>Cancer Lett.</i> 149(1-2):53-60 (2000) |
| EF | Rabinowicz et al.. "Differential methylation of genes and retrotransposons facilitates shotgun sequencing of the maize genome." <i>Nat. Genet.</i> 23:305-308 (1999) |
| EG | Ren et al.. "Chemical mismatch cleavage combined with capillary electrophoresis: detection of mutations exon 8 of the cystathionine beta-synthase gene." <i>Clin. Chem.</i> 44:2108-14 (1998) |
| EH | Roda et al.. "Chemiluminescent imaging of enzyme-labeled probes using an optical microscope-videocamera luminograph." <i>Anal. Biochem.</i> 257(1):53-62 (1998) |
| EI | SantaLucia et al.. "Improved nearest-neighbor parameters for predicting DNA duplex stability." <i>Biochemistry</i> 35:3555-3562 (1996) |
| EJ | Schena et al.. "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray." <i>Science</i> 270:467-470 (1995) |
| EK | Schultz and Dervan. "Sequence-specific double-strand cleavage of DNA by penta-N-methylpyrrolicarboxamide EDTA X Fe(II)." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 80(22):6834-7 (1983) |
| EL | Sewell and Durbin. "Method for calculation of probability of matching a bounded regular expression in a random data string." <i>J. of Computational Biology</i> 2:25-31 (1995) |
| EM | Siddiqi et al.. "Evaluation of electrochemiluminescence- and bioluminescence-based assays for quantitating specific DNA." <i>J. Clin. Lab. Anal.</i> 10(6):423-31 (1996) |
| EN | Squire et al.. "Multiple frequency fluorescence lifetime imaging microscopy." <i>J. Microscopy</i> 197(2):136-149 (2000) |
| EO | Stevenson et al.. "Synchronous luminescence: a new detection technique for multiple fluorescent probes used for DNA sequencing." <i>Biotechniques</i> 16(6):1104-11 (1994) |
| EP | Stimpson et al.. "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 92(14):6379-6383 (1995) |
| EQ | Swaroop et al.. "A simple and efficient cDNA library subtraction procedure: isolation of human retina-specific cDNA clones." <i>Nucleic Acids Res.</i> 19(8):1954 (1991) |
| ER | Syvänen et al.. "Fast quantification of nucleic acid hybrids by affinity-based hybrid collection." <i>Nucleic Acids Res.</i> 14(2):5037-48 (1986) |
| ES | Szybalski. "Universal restriction endonucleases: designing novel cleavage specificities by combining adapter oligodeoxynucleotide and enzyme moieties." <i>Gene</i> 40(2-3):169-73 (1985) |

COPY OF PAPERS
ORIGINALLY FILED



RECEIVED

MAR 20 2002

ATTORNEY DOCKET NO. ~~01173-000101~~
SERIAL NO. ~~09/637-751~~
Page 6 of 6

TECH CENTER 1600/2900

09/994,311

01173.000103

| | |
|----|---|
| ET | Taylor. Protein immobilization: fundamentals and applications (M. Dekker, New York, 1991) |
| EU | Tibbe et al.. "Optical tracking and detection of immunomagnetically selected and aligned cells." <i>Nat. Biotechnol.</i> 17(12):1210-3 (1999) |
| EV | Unrau and Deugau. "Non-cloning amplification of specific DNA fragments from whole genomic DNA digests using DNA 'indexers'" <i>Gene</i> 145:163-169 (1994) |
| EW | Vasmatzis et al.. "Discovery of three genes specifically expressed in human prostate by expressed sequence tag database analysis." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95:300-304 (1998) |
| EX | Velculescu et al.. "Serial analysis of gene expression." <i>Science</i> 270(5235):484-7 (1995) |
| EY | Venezia and O'Hara. "Rapid motif compliance scoring with match weight sets." <i>Comput. Appl. Biosci.</i> 9(1):65-9 (1993) |
| EZ | Vo-Dinh et al.. "Surface-enhanced Raman gene probes." <i>Anal. Chem.</i> 66(20):3379-83 (1994) |
| FA | Volkers et al.. "Microwave label detection technique for DNA in situ hybridization." <i>Eur. J. Morphol.</i> 29(1):59-62 (1991) |
| FB | Wada et al.. "Representational difference analysis of cDNA of genes expressed in embryonic kidney." <i>Kidney Int.</i> 51:1629-1638 (1997) |
| FC | Walker et al.. "Strand displacement amplification--an isothermal, in vitro DNA amplification technique." <i>Nucleic Acids Res.</i> 20(7):1691-6 (1992) |
| FD | Walt. "Techview: molecular biology. Bead-based fiber-optic arrays." <i>Science</i> 287(5452):451-2 (2000) |
| FE | Wansink et al.. "Fluorescent Labeling of Nascent RNA Reveals Transcription by RNA Polymerase II in Domains Scattered Throughout the Nucleus." <i>Journal of Cell Biology</i> 122(2):283-293 (1993) |
| FF | Whitney et al.. "A genome-wide functional assay of signal transduction in living mammalian cells." <i>Nat. Biotechnol.</i> 16(13):1329-33 (1998) |
| FG | Wood et al.. "Base composition-independent hybridization in tetramethylammonium chloride: a method for oligonucleotide screening of highly complex gene libraries." <i>Proc. Natl. Acad. Sci. U.S.A.</i> 82(6):1585-1588 (1985) |
| FH | Xiong and Laird. "COBRA: a sensitive and quantitative DNA methylation assay." <i>Nuc. Acid Res.</i> 25(12):2532-2534 (1997) |
| FI | Yao and Kow. "Further characterization of Escherichia coli endonuclease V. Mechanism of recognition for deoxyinosine, deoxyuridine, and base mismatches in DNA." <i>J. Biol. Chem.</i> 272:30774-79 (1997) |
| FJ | Yeh et al.. "Mammalian topoisomerase I has base mismatch nicking activity." <i>J. Biol. Chem.</i> 269(22):15498-504 (1994) |
| FK | Youil et al.. "Detection of 81 of 81 known mouse beta-globin promoter mutations with T4 endonuclease V11--the EMC method." <i>Genomics</i> 32:431-435 (1996) |
| FL | Yu et al.. "Cyanine dye dUTP analogs for enzymatic labeling of DNA probes." <i>Nucleic Acids Research</i> 22(15):3226-3232 (1994) |
| FM | Zlokarnik et al.. "Quantitation of transcription and clonal selection of single living cells with B-lactamase as reporter." <i>Science</i> 279:84-88 (1998) |

EXAMINER:

HORLICK

DATE CONSIDERED:

5/5/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449
U.S. DEPARTMENT OF COMMERCE (Rev. 7-80)
PATENT AND TRADEMARK OFFICE

LIST OF INFORMATION CITED BY APPLICANT
(Use several sheets if necessary)

ATTORNEY DOCKET NO.: ~~01173.0001U1~~ 01173.0001V3 SERIAL NO. ~~001637-751~~ 09/994,311

APPLICANT: Kaufman et al.

| | |
|--|-------------|
| FILING DATE: August 11, 2000 <i>November 26, 2001</i> | GROUP: 1656 |
|--|-------------|

U.S. PATENT DOCUMENTS

[illegible]

RECEIVED
MAR 20 2002
TECH CENTER 1600/2900

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages, Etc.)

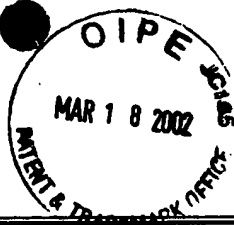
| OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages, etc.) | | |
|---|--|--|
| | | |
| | | |
| | | |

EXAMINER:

DATE CONSIDERED: 5/5/03

EXAMINER: HORLICK DATE CONSIDERED: 5/5/69

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



COPY OF PAPERS
ORIGINALLY FILED

ATTORNEY DOCKET NO. 01173.0001U3
SERIAL NO. 09/994,311
CONFIRMATION NO. 9570
Page 1 of 1

Form PTO-1449
U.S. DEPARTMENT OF COMMERCE (Rev. 7-80)
PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO.: 01173.0001U3

SERIAL NO. 09/994,311
CONFIRMATION NO. 9570

LIST OF PRIOR ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT: Kaufman et al.

FILING DATE: November 26, 2001

GROUP: 1656

U.S. PATENT DOCUMENTS

| EXAMINER INITIALS | | DOCUMENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|------------------|-------|----------|----------------------------------|
| RMA | A1 | 6,027,894 | 02/22/00 | Sapolsky et al. | | | |
| | A2 | 5,994,068 | 11/30/99 | Guilfoyle et al. | | | |
| | A3 | 5,858,671 | 01/12/99 | Jones | | | |
| | A4 | 5,858,656 | 01/12/99 | Deugau et al. | | | |
| | A5 | 5,728,524 | 03/17/98 | Sibson | | | |
| | A6 | 5,710,000 | 01/20/98 | Sapolsky et al. | | | |
| | A7 | 5,654,413 | 08/05/97 | Brenner | | | |
| | A8 | 5,599,675 | 02/04/97 | Brenner | | | |
| | A9 | 5,508,169 | 04/16/96 | Deugau et al. | | | |

RECEIVED
MAR 20 2002
TECH CENTER 1600/2900

FOREIGN PATENT DOCUMENTS

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

EXAMINER: HORLICK

DATE CONSIDERED: 5/5/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.